Amendments to the Claims

Claim 1(Currently Amended). A method for making narrow size distribution nanoscale powders comprising:

selecting a precursor mixture wherein the mixture comprises at least one metal containing precursor;

the metal containing precursor has an average molecular weight of less than 2000 grams per unit mol of the metal;

the metal containing precursor has a normal boiling point greater than 350K;

a viscosity of the precursor mixture is between 0.1 to 250 cP;

processing the precursor mixture under conditions that produce nanoscale powder from the precursor mixture;

wherein the processing is conducted in a flow reactor system such that the axial velocity, axial length and axial dispersion coefficient in the flow reactor system yield a plug flow index of more than 50; and

quenching the nanoscale powder using Joule Thompson quench.

Claim 2(Previously amended). The method of claim 1 wherein the metal content in the precursor mixture is greater than 22% by weight.

Claim 3(Original). The method of claim 1 wherein the act of processing the precursor mixture comprises reacting the precursor mixture with oxygen.

Claim 4(Original). The method of claim 3 wherein heat released during the precursor mixture's reaction with oxygen is on average greater than 1 kJ per liter of precursor mixture.

Claim 5(Cancelled).

Claim 6(Original). The method of claim 1 wherein the precursor mixture comprises at least two metal containing precursors.

Claim 7(Original). The method of claim 1 wherein the precursor mixture comprises water.

Claim 8(Original). The method of claim 1 wherein the precursor mixture comprises a hydrocarbon.

Claim 9(Previously Amended). The method of claim 1, wherein the precursor mixture comprises an acetate.

Claims 10-19(Cancelled).

Claim 20(Previously added). The method of claim 1, wherein the precursor mixture comprises an alkanoate.

Claim 21(Previously added). A product comprising of nanoscale powders prepared by the method of claim 1.

Claim 22(New). The method of claim 1 wherein the axial velocity, axial length and axial dispersion coefficient in the flow reactor system yield a plug flow index of more than 500.

Claim 23(New). A method for making narrow size distribution nanoscale powders comprising:

selecting a precursor mixture wherein the mixture comprises at least one metal containing precursor;

the metal containing precursor has a normal boiling point greater than 350K;

a viscosity of the precursor mixture is between 0.1 to 250 cP;

processing the precursor mixture under conditions that produce nanoscale powder from the precursor mixture; and

wherein the processing is conducted in a flow reactor system such that the axial velocity, axial length and axial dispersion coefficient in the flow reactor system yield a plug flow index of more than 50.

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